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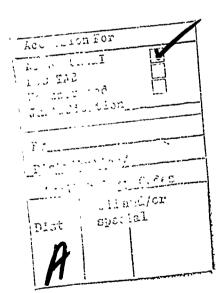
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Personnel Systems and Contemporary Problems

Research Memorandum 75-3

ATTITUDES CONCERNING JOB APPROPRIATENESS FOR WOMEN IN THE ARMY

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and

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Between December 1973 and December 1974 the number of women in the Army increased by 53% to a total of 38,174.1 During that period also the Army opened to women a number of MOS that previously had been closed to them.2 By the end of 1974, therefore, not only were more women in the Army than there had been since the end of World War II,3 but more women (both proportionately and in absolute numbers) were in nontraditional jobs as well.4 Table 1 shows the number and percentages of women in traditional and nontraditional job categories for 1973 and for 1974.

Given this increase in number and percentage of women in various kinds of Army jobs (particularly in nontraditional jobs) it is important to ask how Army personnel generally, both men and women, are reacting to this development. This report provides some preliminary data indicating this reaction.

The data presented here were collected as part of a larger effort to construct a research instrument that would elicit attitudes toward women in the Army. In January 1974 an anonymous questionnaire containing 174 items was administered to a combined sample of approximately 800 soldiers at Fort Lewis, Washington; Madigan General Hospital at Fort Lewis; Fort Dix, New Jersey; and Fort Meade, Maryland; from this group, 721 usable questionnaires were obtained.

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Strength of the Army, DCSPER-46. Office of the Deputy Chief of Staff for Personnel, Department of the Army. December 1973 and December 1974.

² AR 611-201, 1 July 1974.

³ See <u>Utilization of Military Women</u>. Office of the Assistant Secretary of Defense (Manpower & Reserve Affairs). December 1972. Page B-10.

⁴ See Enlisted Strength Inventory Report, COPO-45. US Military Personnel Center, Department of the Army. December 1973 and December 1974. The criteria for classifying MOS as traditional or nontraditional were as follows. First, MOS were grouped following the Career Management Fields Enlisted MOS Structure (DCSPER-GSD). Traditional MOS were defined as those which 3% or more of enlisted women not in basic training occupied as of 31 December 1973. Nontraditional MOS were determined on the basis of two criteria. First, within the broad categories such as Ammunition, Marine, etc., all the MOS listed had to be open to women as of 31 December 1973. Second, in order to be considered a nontraditional MOS the MOS would have to include less than 1% of all enlisted women not in basic training as of 31 December 1973.

Table l

PERCENTAGE OF ENLISTED WOMEN IN TRADITIONAL AND NONTRADITIONAL MOS, BY YEAR

MOS	Traditional MOS	nal MOS 1974	MOS	Nontradi 1973	Nontraditional MOS 73 1974
Medical	30.6 (4101) ^b	24.6 (5607)	Ammunition	(0) 00.	.11 (24)
Administration		33.1 (7940)	Marine	(0) 00.	<u> </u>
Communication	10.8 (1440)	8.9 (2027)	Nuclear Power		
			Production	(0) 00.	(0) 00.
Supp1y	4.6 (611)	5.9 (1324)	Petroleum	(0) 00.	<u> </u>
Data Processing	3.0 (401)	${\sim}$	Railway	(0) 00.	.00 (2)
			Construction	.02 (3)	.19 (42)
Total	83.5 (11173)	75.1 (17085)	Service and		
			Renovation	.05 (7)	.29 (65)
			Special		
			Services	_	~
			Maintenance	(4%) 81.	.94 (213)
		•	Topography and		
			Printing	_	(47) 25.
			Motor Transport	.33 (44)	.60 (137)
			Law Enforcement	_	3.73 (848)
			Total	1,42 (191)	6.82 (1548)

^a The percentage for MOS categories in 1975 is based on a total N of 15,597, the number of enlisted women in the Army not in Basic Training 51 December 1975. The percentage for MOS categories in 1574 is based on a total N of 22,749, the number of enlisted women in the Army not in Basic Training 31 December 1974.

The figures in parentheses indicate the actual number of women within each classification.

^c Maintenance includes all the MOS within each of the following classifications: Fixed Plant Communication Maintenance Data Processing Equipment Maintenance Intercept Equipme it Maintenance Mechanical Maintenance Aircraft Maintenance Of this sample, 540 (75%) were male and 181 (25%) were female; 401 (56%) were officers and 320 (44%) were enlisted. Approximately two-thirds of the women said they expected to leave the Army before they retired, but only 48% of the men said this. The sample design had been constructed so as to include both white and nonwhite respondents and to include samples from installations that varied in type and were geographically dispersed. Nevertheless, until certain additional analyses have been carried out one should be cautious in generalizing the results to the rest of the Army. It should be noted also that the situation of women in the Army is changing rapidly, and the attitudes expressed on this topic at one time may or may not coincide with the attitudes expressed at some later date. Among the various items included in the questionnaire was a set of items that asked about job appropriateness. Each respondent was presented with a list of 24 jobs and was asked to indicate, for each job, whether he did or did not think it was appropriate for women.

RESULTS AND INTERPRETATION

Table 2 shows the 24 job titles ranked according to the frequency with which the respondents judged them appropriate for women. The table such both the overall frequency of endorsement and the separate frequencies of endorsement by male and female officers and by male and female enlisted.

A number of observations could be made about these jobs and the relative frequency with which one or another of them was judged to be appropriate for women. Here, however, before discussing male/female and officer/enlisted differences, we wish to note only that of all the jobs listed, only one (rifle-carrying infantry foot soldier) was consistently judged by the majority of respondents to be inappropriate for women.

These 24 job titles were selected from a list of approximately 100 that had been used in a pretest. The 24 jobs selected were those that (a) showed greatest variability in whether respondents thought they were appropriate for women and (b) included jobs that were specifically military as well as some that were not. As it happened, the considerable variability that previously had been found among these 24 jobs was not found five months later when the data reported here were collected. This means that many jobs that previously had been judged inappropriate for women were, only five months later, being judged appropriate. Whether this difference reflects genuine attitude change over the five months (as is suggested by the fact that it was primarily the men who changed--bringing them up to where the women were already), whether it reflects differences in the characteristics of the earlier and later samples, or whether it reflects certain differences in the procedure used when the questions were asked-it is impossible to tell on the basis of the information presently available to us.

Table 2

PERCENTAGE OF RESPONDENTS PERCEIVING JOBS AS APPROPRIATE
FOR WOMEN, OVERALL AND BY SEX AND RANK

		Offi	cers	Enlisted		
Job	Overall (N = 721)	Men (n = 290)	Women (n = 111)	Men (n = 250)	Women (n = 70)	
Cook	98	99	98	98	96	
Social Worker	98	99	100	96	97	
Human Relations						
Officer	97	98	100	96	97	
Lawyer	96	98 97 98 91 91	99	93	96	
Band Leader	96	98	95	93 94	97	
Statistician	95	97	95	94	97 36	
General's Aid	91	91	93	91	90	
Radar Technician	90	93	93 98	86	81	
Bartender	86	90	82	85	73	
Butcher	83	90 88	80	83	70	
Truck Driver	82	84	86	78	81	
Navigator	82	84	88	76	83	
Janitor	81	88	82	76 74	83 69	
Parachute Rigger	80	86	82	71,	70	
Plumber	77	81	86	67	73	
Welder	76	82	81	70	73 64	
Ammunition Supply	, ,		1	1 "	-	
Person	75	81	79	71	66	
Company Commander		-	17	'-	"	
in a Mixed-Sex						
Company	74	69	85	74	81	
Diesel Mechanic	69		81	58	63	
MP-Guard Duty	69	73 69	78	58 66	74	
Helicopter Pilot	66	63	83	60	69	
Jet Pilot	60	55	75	52	69 67	
Bomb Disposal		1	'		-	
Specialist	55	56	74	45	56	
Rifle-Carrying		1	' '	'	1	
Infantry Foot		l	ł		l	
Soldier	28	23	49	25	33	

Table 3 shows the nine jobs on which men and women differed significantly in the frequency with which they judged the job appropriate for women.

Table 3

PERCENTAGE DIFFERENCE BETWEEN MEN AND WOMEN FOR JOBS
ON WHICH THEY DIFFERED SIGNIFICANTLY

Job	Percent Difference	pb	
Statistician	+5	.01	
Bartender	+9	.01	
Futcher	+10	.001	
Company Commander in a			
Mixed-Sex Company	-12	.001	
MP-Guard Duty	-10	•05	
Helicopter Pilot	-15	•001	
Jet Pilot	-20	.001	
Bomb Disposal Specialist Rifle-Carrying Infantry	-16	.001	
Foot Soldier	-1 6	.001	

As can be seen, in three cases (statistician, bartender, butcher) the men judged the job appropriate for women more often than the women did, while in six cases (company commander in a mixed-sex company, MP-guard duty, helicopter pilot, jet pilot, bomb disposal specialist, and rifle-carrying infantry foot soldier) the jobs were judged appropriate for women more often by the women themselves than they were by the men.

A look at these six job titles suggests that they have several things in common. First, the jobs are exclusively or primarily military occupations. Second, they are among the seven jobs (see Table 2) that were least often judged appropriate for women. Third, these are jobs which in the past have been occupied primarily or exclusively by men. This pattern suggests that Army women, to a greater extent than Army men, believe women are able to play an active and extensive role in today's military. And among the women, the officers apparently believe this to a greater extent than the

⁺ indicates that more men than women viewed the job as appropriate for women; - indicates the reverse.

b p is determined by two-tailed difference of proportions test.

enlisted do. For example, Table 2 shows that, for 22 of the 24 jobs listed,6 female officers judged the job appropriate for women more often than the enlisted women did. Both these conclusions are consistent with the results reported by Fuller in her 1973 study of attitudes in the Navy.7

A second point suggested by the pattern observed in these six jobs is that some of the somen would like to expand their roles even to the point of taking jobs vetel potentially place them in a combat or combat-related situation. However, while more women than men endersed these positions, one of these positions (rifle-carrying infantry foot soldier) was judged appropriate by only 40% of the women in the sample.

Table 4 shows th 17 jobs on which officers and enlisted differed significantly in the frequency with which they judged the job appropriate for women. It can be seen that in each came the job was judged appropriate for women more often by the officers than it was by the enlisted personnel. There are number o' possible explanations for this pattern, but perhaps the most ausible one is the average difference in educational level between the two e pups.8 On no as also that the officers see women playing an active role the white are ten with regard to such traditionarly male occupations s jet pilot, a recopter pilot bomb disposal specialist, and ammunition su ply per n it is interesting to note, however, that two jobs which women judge appropriate for women more often than men did (rifle-carrying in antry foot soldier and company commander in a mixed-sex company) do not appear on this list. With regard to the job of rifle-carrying infantry ldier, it appears that whatever causes officers and enlisted to differ in their opinion of the appropriateness of the other jobs (e.g., differences in educational level) does not affect opinions concerning the appropriateness of women going into combat as infantry foot soldiers. With regard to the job of company commander in a mixed-sex company, it may be that the absence of this job from the list is due to the relative scarcity of command positions. MECHANICAL SERVICES OF SERVICE

⁶ The two jobs which were <u>not</u> judged as appropriate more often by female officers than by enlisted women represented a tie in one instance (butcher) and in the other instance (band leader) a reversal of trivial mignitude.

Fuller, Carol H. The role of women in the Navy: A study of attitudes and scale development. WTR 73-41. Washington, DC: Naval Personnel Research & Development Laboratory, June 1973.

⁸ See Seboda, B. L., Morris, B. V., Jr. and Ward, C. D. Methods for Enhancing the Military Potential of Selected Manpower Segments. Columbia, MD: Westinghouse Health Systems, August 1974.

Table 4

PERCENTAGE DIFFERENCE BETWEEN OFFICERS AND ENLISTED PERSONNEL FOR JOBS ON WHICH THEY DIFFERED SIGNIFICANTLY

Job	Percent Difference	p P
Statistician Butcher	+4 +6	.01 .05
Helicopter Pilot Jet Pilot	+7 +8	.01
Bomb Disposal Specialist Social Worker	+13 +3	.001
Human Relations Officer Lawyer	+3 +1 ¹ +	.01
Radar Technician Truck Driver	+10 +6	.001
Navigator Janitor	+8 +14	.01
Parachute Rigger	+12 +14	.001
Plumber Welder Ammunition Supply Person Diesel Mechanic	+14 +13 +10 +17	.001 .01 .001

The + indicates that more officers than enlisted personnel viewed the job as appropriate for women.

There is currently a good d-al of competition for these positions, and opening these positions to women could probably be viewed as making it harder for male officers to obtain them. Data from Table 5 support this interpretation.

This table shows, separately for officers and enlisted, the differences in the percentage of men and women judging the job as appropriate for women. As can be seen, significantly more (16%) female than male officers judged the job "company commander in a mixed-sex company" as appropriate for women. Among the enlisted, the difference was not significant (see Table 2).

b p is determined by two-tailed difference of proportions test.

Table 5

PERCENTAGE DIFFERENCE BETWEEN MEN AND WOMEN FOR JOBS ON WHICH THEY SIGNIFICANTLY DIFFER, BY RANK

	Officers			Enlisted	
Job	Percent Difference	p ^b	Job	Percent Difference	p ^b
Bartender	+8	.05	Bartender	+12	.01
Butcher	+8	.05	Butcher	+13	.01
Company Commander in a		-	Jet Pilot	-15	.001
Mixed-Sex Company	-16	.01	Statistician	1 8	.05
Helicopter Pilot	-20	.001			-
Jet Pilot	-20	.001			
Bomb Disposal Specialist	-18	.001			
Rifle-Carrying Infantry			}		
Foot Soldier	-26	.001			

The + indicates that more men than women viewed the job as appropriate for women; - indicates the reverse.

DISCUSSION

Five general conclusions emerge from these data. First, most of the jobs examined in this research are considered appropriate for women by the majority of men and women who took part in this research. Second, proportionately more women than men believe that women are able to handle a wide variety of non-traditional jobs and take an active role in today's Army. Third, proportionately more officers than enlisted endorse this expansion of women's role. Fourth, of the several groups studied, female officers—more than any of the others—believe in a general and pervasive expansion of the role of women in the military. And fifth, women are likely to be available as candidates for a wide range of noncombat occupations, and male resistance to having women in these positions is likely to be minimal.

p is determined by two-tailed difference of proportions test.

AR 611-201, 1 July 1974.

Enlisted Strength Inventory Report, COPO-45. US Military Personnel Center, Department of the Army. December 1973 and December 1974.

Fuller, Carol H. The role of women in the Navy: A study of attitudes and scale development. WTR 73-41. Washington, DC: Naval Personnel Research and Development Laboratory, June 1973.

Seboda, B. L., Morris, V. B., Jr., and Ward, C. D. <u>Methods for Enhancing the Military Potential of Selected Manpower Segments</u>. Columbia, MD: Westinghouse Health Systems, August 1974.

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<u>Utilization of Military Women.</u> Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs). December 1972.